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1655

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# TRANSMITTAL FORM

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Total Number Of Pages In This Submission

8

Application Number

09/613,006

Filing Date

July 10, 2000

First Named Inventor

Mark A. SCHENA

Group Art Unit

1655

Examiner Name

B. Forman

Attorney Docket No.

529492000100

## ENCLOSURES (check all that apply)

☐ Fee Transmittal Form - duplicate☐ Fee Attached☐ Supplemental Amendment / Reply☐ After Final☐ Affidavits/declarations☐ Extension of Time Request☐ Express Abandonment Request☐ Information Disclosure Statement☐ Certified Copy of Priority Document(s)☐ Response to Missing Parts/  
Incomplete Application☐ Response to Missing Parts  
under 37 CFR 1.52 or 1.53☐ Assignment Papers  
(for an Application)☐ Drawing(s)☐ Licensing-related Papers☐ Petition☐ Petition to Convert to a  
Provisional Application☐ Power of Attorney, Revocation  
Change of Correspondence Address☐ Terminal Disclaimer☐ Request for Refund☐ CD, Number of CD(s) \_\_\_\_\_

Remarks

☐ After Allowance Communication to  
Group☐ Appeal Communication to Board of  
Appeals and Interferences☐ Appeal Communication to Group  
(Appeal Notice, Brief, Reply Brief)☐ Proprietary Information☐ Status Letter☒ Other Enclosure(s) (please identify  
below):

Communication (2 pages)

Resume of Neil Winegarden (5 pages)

Return receipt postcard

## SIGNATURE OF APPLICANT, ATTORNEY OR AGENT

Firm

or

Individual Name

Morrison &amp; Foerster LLP, 755 Page Mill Road, Palo Alto, California 94304

Gladys H. Monroy (Reg. No. 32,430)

Signature

Date

January 27, 2003

## CERTIFICATE OF MAILING BY "EXPRESS MAIL"

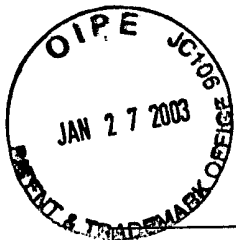
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Tamara Alcaraz

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PATENT  
Docket No. 529492000100

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Tamara Alcaraz

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Mark A. Schena

Serial No.: 09/613,066

Filing Date: July 10, 2000

For: MICROARRAY METHOD OF  
GENOTYPING MULTIPLE SAMPLES  
AT MULTIPLE LOCI

Examiner: B. Forman

Group Art Unit: 1655

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**COMMUNICATION**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

This communication pertains to the Response submitted December 13, 2002. Attached please find a copy of the resume of Neil Winegarden.

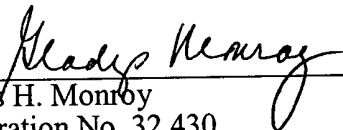
## REMARKS

In the unlikely event that the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 592492000100. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

Dated: January 27, 2003

By:

  
Gladys H. Monroy  
Registration No. 32,430

Morrison & Foerster LLP  
755 Page Mill Road  
Palo Alto, California 94304-1018  
Telephone: (650) 813-5711  
Facsimile: (650) 494-0792

# Neil Winegarden

5958 Blue Spruce Avenue  
Burlington, ON, Canada  
L7L 6T9  
(416) 340-4378 (Cell)  
winegard@uhnres.utoronto.ca

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## Professional Experience

2002 – Present      University Health Network      Toronto, ON

### Head of Operations, Microarray Centre

- Oversee the day to day operations of the Microarray Centre
- Supervise a team of 18-20 staff, including 2 managers
- Coordinate the larger staff of 30, including 3 research scientists
- Coordinate research of a large project group for Genome Canada Grant
- Assist in administering 4 grants worth over \$12M in total
- Recruit technical and management staff
- Assist in the recruitment of an engineering manager to start a new automation team
- Direct research and development in the Microarray Centre
- Recruit partnerships from the biotechnology industry for new product and technology development
- Deliver presentations on microarray technology and new developments at internationally held workshops and conferences
- Draft contracts and transfer agreements
- Coordinate marketing of the Microarray Centre including arranging for booths at tradeshow
- Organize international symposiums on microarray technology in partnership with the Professional Development Centre of the University of Toronto.

1999-2002      University Health Network      Toronto, ON

### Manager of Commercialization and External Contracts, Microarray Centre

- Assisted in development, marketing and testing of advanced robotic components for high throughput molecular biology applications
- Recruited partnerships from the biotechnology industry for novel technology development
- Marketed products and services generated through the microarray laboratory at the University Health Network
- Delivered presentations on current technologies in the laboratory at internationally held workshops and conferences
- Developed partnerships with leading commercial biotechnology companies for co-development and testing of novel products
- Further designed and wrote software for data analysis and visualization
- Drafted contracts and transfer agreements
- Recruited, trained and supervised technicians in the microarray technology laboratory

- Directed research and development in the microarray technology laboratory
- Organized international symposiums on microarray technology in partnership with the Professional Development Centre of the University of Toronto.

1998 – 1999                      Ontario Cancer Institute, Princess Margaret Hospital                      Toronto, ON

**Research Technician Level 4, Microarray Laboratory**

- Assisted in the development of an advanced robotic microarray fabrication system
- Developed robotic operating protocols through software design for microarray printing
- Assisted in the development of protocols for microarray manufacture, usage, and analysis
- Presented seminars on microarray technology at international workshops (by invitation)
- Developed partnerships with biotechnology companies to act as beta-testers for new hardware, software and molecular biology products
- Assisted in the training of researchers for use of array technology
- Designed and wrote software programs for data analysis and visualization
- Assisted in the design of advanced bioinformatics software for data collection and warehousing

1998                                      Allelix Pharmaceuticals                                      Mississauga, ON

**Research Associate, New Technology and Virology Departments**

- Assisted in the implementation of genetic microarray technology
- Helped coordinate efforts to develop highly specific probes
- Developed software modules to control a prototype robot for array fabrication
- Suggested and tested new methods to improve and advance the technology
- Developed new screening technologies to find novel antiviral agents
- Adapted existing technologies to a high-throughput platform

## Education

- |   |                       |                 |
|---|-----------------------|-----------------|
| 1994-1997   | University of Toronto | Mississauga, ON |
| <b>M.Sc.</b>  |                       |                 |
| <ul style="list-style-type: none"><li>• Molecular Cell Biology – Zoology Department</li><li>• Heat Shock Gene Regulation</li><li>• Transcription regulation, biochemistry focus</li></ul> |                       |                 |
| 1990-1994   | University of Toronto | Mississauga, ON |
| <b>B.Sc.</b>  |                       |                 |
| <ul style="list-style-type: none"><li>• Honours Bachelor's degree in biology and minor in chemistry</li></ul>   |                       |                 |

## Other Training

- |  |  |              |
|--|--|--------------|
| 2001   | Professional Development Centre, University of Toronto | Toronto, ON  |
| <b>Advanced Project Management</b>             |  |              |
| 2001   | Professional Development Centre, University of Toronto | Toronto, ON  |
| <b>Hands on Microsoft Project</b>              |  |              |
| 1996   | Sheridan College                                       | Brampton, ON |
| <b>Introductory and Advanced C Programming</b> |  |              |

## Publications

### *Invited Reviews*

Winegarden, N., Chen, L., and X. Chen, 2002. "Microarrays – Looking at the world thousands of genes at a time". Chinese Medical Journal, In press

Winegarden, N. and J. Woodgett, 2001. "Microarrays and Drug Discovery", World Markets Business Briefing, Pharmatech 2001, pp 130-132.

### *Peer Reviewed Publications*

Iscoe, N.N., Barbara, M., Gu, M., Gibson, M, Modi, C., and N. Winegarden, 2002. "Representation is faithfully preserved in global cDNA amplified exponentially from sub-picogram quantities of mRNA". Nature Biotechnology, In Press (Expected September).

Chang, W.Y., Winegarden, N.A., Paraiso, J.P., Stevens, M.L., and J.T. Westwood, 2000. "Visualization of nascent transcripts on Drosophila polytene chromosomes using BrUTP incorporation". Biotechniques, Vol. 29, pp934-6

Mercier, P. A., Winegarden, N.A. and J.T. Westwood, 1999. "Human heat shock factor 1 is predominantly a nuclear protein before and after heat stress". Journal of Cell Science, Vol. 112, pp 2765-2774

Winegarden, N., Wong, K., Sopta, M., and J.T. Westwood, 1996. "Sodium salicylate decreases intracellular ATP, induces both heat shock factor binding and chromosomal puffing, but does not induce hsp 70 gene transcription in *Drosophila*". Journal of Biological Chemistry, Vol. 271, pp 26971-80

## Patents

A patent entitled "Methods for Production of Microarrays of Biological Samples" has been filed in Canada and the United States of America.

- Canadian patent October 3<sup>rd</sup>, 2000 (#2,322,086)
- US provisional patent October 4<sup>th</sup>, 2000 (60/237,369)
- Methods related to the use, function and design of a microarraying robot.
- Methods related to the calibration of the robotics, testing of arrayer accuracy and quality control of arrays.

## Invited Presentations

|                     |  |
|---------------------|--|
| October 27-31, 2002 | Chips to Hits 2002 <ul style="list-style-type: none"><li>• Philadelphia, PA, USA</li></ul>   |
| September 6-9, 2002 | 3 <sup>rd</sup> Annual BioMEMS & Biomedical NANOTECH World 2002 <ul style="list-style-type: none"><li>• Columbus, OH, USA</li></ul>  |
| July 3, 2002        | International Association for Food Protection Annual Meeting <ul style="list-style-type: none"><li>• San Diego, CA, USA</li></ul>  |
| May 14-21, 2002     | Stratagene/Iobion – Got Genes Road Show <ul style="list-style-type: none"><li>• Evry, France</li><li>• Heidelberg, Germany</li><li>• London, England</li></ul>                                     |
| April 22-26, 2002   | Stratagene/Iobion – Got Genes Road Show <ul style="list-style-type: none"><li>• San Diego, CA, USA</li><li>• San Francisco, CA, USA</li><li>• Raleigh, NC, USA</li><li>• Boston, MA, USA</li></ul> |
| January 16, 2002    | Plant and Animal Genome X – Microarray Breakout Session <ul style="list-style-type: none"><li>• San Diego, CA, USA</li></ul>   |
| July 9, 2001        | Biochip Technology Seminar <ul style="list-style-type: none"><li>• Tokyo, Japan</li></ul>  |
| June 1, 2001        | CFBS Annual Meeting – Microarray Breakout Session <ul style="list-style-type: none"><li>• Nottawasaga, Ontario</li></ul>   |
| January 17, 2001    | Plant and Animal Genome IX – ArrayIt Microarray Breakout Session <ul style="list-style-type: none"><li>• San Diego, CA, USA</li></ul>  |

- |                      |  |
|----------------------|--|
| November 6-9, 2000   | <b>Chips to Hits 2000</b> <ul style="list-style-type: none"><li>• Philadelphia, PA, USA</li></ul>                      |
| November 16-18, 1999 | <b>International Microarray Users Forum</b> <ul style="list-style-type: none"><li>• Burley, Hants, UK</li></ul>        |
| June 9-10, 1999      | <b>Workshop on Genomic Micro-arrays Technology</b> <ul style="list-style-type: none"><li>• Tokyo, Japan</li></ul>      |
| November 9-10, 1999  | <b>Workshop on Microarray Technology</b> <ul style="list-style-type: none"><li>• Irvine, CA, USA</li></ul>             |
| June 15-16, 1999     | <b>Technology Workshop on Genomic Microarrays</b> <ul style="list-style-type: none"><li>• Arlington, VA, USA</li></ul> |

## **Symposia Organized**

- |                     |   |
|---------------------|---|
| October 23-25, 2001 | <b>2<sup>nd</sup> Annual Ontario Microarray Network Technology Symposium</b> <ul style="list-style-type: none"><li>• Toronto, Ontario</li></ul> |
| November 1-2, 2000  | <b>1<sup>st</sup> Annual Ontario Microarray Network Technology Symposium</b> <ul style="list-style-type: none"><li>• Toronto, Ontario</li></ul> |
| June 13, 1999       | <b>University Health Network Microarray Infosession</b> <ul style="list-style-type: none"><li>• Toronto, Ontario</li></ul>                      |